

### **REMARKS**

The various claims have been rejected under 35 USC 102 or 35 USC 103 in view of Wright. In the above Amendment, claim 1 has been amended to include the limitations of claims 3-6 as originally filed (which have themselves been cancelled). Claim 1 is not obvious in view of Wright.

As amended, claim 1 recites that the secondary circuit includes a post regulator circuit including a magnetic amplifier (magamp) controller; and that a **preload circuit** applies a preload on the main circuit as a result of the secondary circuit going out of control, with the **preload circuit including an output directly to the second terminal and an input from the magamp controller**. (These amended limitations come from originally-filed claims 3-6.)

In the illustrated embodiment such as shown in Figure 2 as filed, the main output 20 is controlled via a main feedback loop through block 34, and its output voltage is completely independent of the load on the secondary output 22. At the same time, preload circuit 50 uses as an input a signal from the magamp controller 44 associated with the secondary circuit, and one of its outputs is, in turn, directed directly to the second terminal 22. A **feedback loop** for the secondary circuit is thus formed among **magamp controller 44, preload circuit 50, and second terminal 22**, and **also** outputs as needed to the main output 20, as noted in the Specification at page 4, lines 24-27.

An explanation of the advantages of the claimed system is found in the Specification as filed at page 5, lines 2-10 (emphases added):

The overall function of preload circuit 50 is to apply a **preload on the main circuit in case the secondary circuit goes out of control**. This preload helps the secondary output in two ways: the extra **preload on the first output terminal 20** increases the voltage on the secondary transformer winding 40, and the extra preload current of the first output terminal **is fed into the second output terminal 22 and therefore not lost**. In this way, a condition in which a low load is experienced by the main circuit while a high load is experienced by the secondary circuit **does not result in an out of control situation for the secondary circuit**.

The rejection states the Figure 3 embodiment of Wright distinguishes itself from the magamp-based controller shown in Figure 1B of Wright; but the use of a magamp controller, as in the claimed invention, would have been obvious based on the disclosure of the magamp controller 40 in Figure 1B of Wright.

While Figure 1B of Wright shows generally that a magamp controller is one type of approach for controlling a two-output power supply, the claimed invention is distinct from either the magamp control (Figure 1B) *or* the coupled inductor control (Figure 3) of Wright.

With regard to the Figure 3 embodiment of Wright, the embodiment describes a “coupled-inductor topology” which is utterly different from the claimed invention. With a coupled-inductor topology, there can be no true independence between the outputs of the main and secondary terminals: each output voltage changes when the load on the other output changes. The passage in Wright cited in the rejection, column 9, lines 22-67, describes a system in which the +5V output terminal is controlled via a loop, through resistor 172 and optocouplers 174a, 174b, to the *input* side of the main transformer T3. A roughly similar concept is shown in Figure 2 of the Specification as filed, but *only* in regard to the *main circuit*. At the very least, this disclosure is simply *unrelated* to a magamp control of the *secondary circuit*, and a person of skill in the art would see no teaching relevant to the claimed invention.

The Figure 1B embodiment of Wright indeed describes a magamp control 40, but the magamp control is simply used as a direct feedback loop involving the *main circuit only*. There is no teaching of using a magamp control to overcome the “out-of-control” situations that may be experienced by the *secondary circuit*, as recited in claim 1. A person of ordinary skill in the art would see no suggestion in Wright that a magamp control of the secondary circuit, or a preload circuit applying a preload on the main circuit as a result of the secondary circuit going out of control, as recited, is even desirable.

The claimed invention goes beyond anything disclosed or suggested by any embodiment in Wright. As recited in claim 1, the preload circuit applies a preload on the main circuit as a result of the secondary circuit going out of control (as that term is explicitly defined in the Specification) as detected via a magamp controller, and outputs directly to the second terminal. The Figure 3 embodiment of Wright is simply a totally different type of control system, which outputs its control signal to the input side of a main transformer. The Figure 1B embodiment shows a magamp as a basic tool used in control systems, but its use in Wright is directed to the main circuit only.

For these reasons, teachings from the respective embodiments can in no way be combined to render the invention of claim 1 obvious. Claim 1 and its dependent claims 7-11 are therefore deemed allowable.

Claims 12-15 have been cancelled.

Claims 16-20 have been rejected over Wright in view of Chapman; Chapman shows the use of a power supply in a printer. Claim 16, from which claims 17-20 are dependent, has been amended to conform to the limitations of claim 1 as amended above, and is therefore deemed allowable, along with its dependent claims.

The claims are therefore in condition for allowance.

No additional fee is believed to be required for this amendment; however, the undersigned Xerox Corporation attorney authorizes the charging of any necessary fees, other than the issue fee, to Xerox Corporation Deposit Account No. 24-0025.

In the event the Examiner considers personal contact advantageous to the disposition of this case, he is hereby requested to call the undersigned attorney at (585) 423-3811, Rochester, NY.

Respectfully submitted,

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